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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,895	10/21/2003	Douglas S. Ransom	6270/128	3874

757 7590 09/30/2004

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EXAMINER

RODRIGUEZ, PAUL L

ART UNIT PAPER NUMBER

2125

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/689,895	Applicant(s) RANSOM ET AL.	
	Examiner Paul L Rodriguez	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date see office action.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-31 are presented for examination. The preliminary amendment filed 1/20/04 to the specification has been received and entered.

Information Disclosure Statement

2. The information disclosure statement filed 1/23/04 did not attach a PTO-1449 and is not in complete compliance with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. The IDS letter listed the documents for consideration. The Examiner has initialed the list presented in the letter however the applicant should submit a PTO-1449 for these references in response to this office action.

3. The information disclosure statements (IDS) submitted on 5/24/04, 12/29/03 and 10/21/03 have been received. The submission is in compliance with the provisions of 37 CFR 1.97, accordingly, the information disclosure statements have been considered by the Examiner.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 151-157, 326, 420, 422, 430, 436, 512, 520, 530, 1010, 1500-1502 and 1610-1670.

6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains more than 150 words.

Correction is required. See MPEP § 608.01(b).

8. The disclosure is objected to because of the following informalities:

Paragraph 1, the references to related applications should be updated.

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Paragraph 5, the first use of the acronym XML should be defined.

Paragraph 47 uses the acronyms SMTP, MIME and POP without defining, the first use of an acronym should be defined to avoid any confusion.

Paragraph 59 lines 12-13 refers to “supplier/utility 123, 124”, 123 and 124 are back-end servers for supplier and utility 130, 131.

Paragraph 62 line 24 refers to “power management application 211”, previously 111, 211 is a “power management application component”.

Paragraph 64 line 19, refers to “power distribution network 110”, previously “power distribution system 101” and “network 110”.

Paragraph 67 line 7 refers to “load’s 301” in reference to figure 3b, load 301 is in figure 3a, not 3b, which shows the load as 317.

Paragraph 67 line 12 refers to “communications interface 312”, previously 313.

Paragraph 68 line 2 refers to “network 307”, not in figure 3b.

Paragraph 76 line 16 refers to “load management component 250”, previously 259.

Paragraph 77 line 4 refers to “back end server 511”, figure 5b labels 511 as “kWh or kVa pulse sent to IED”.

Paragraph 82 refers to other patent, which needs updating.

Paragraph 83 line 3 refers to “loads 724, 726”, figure 7 labels loads as 722, 724.

Paragraph 83 line 4 refers to “generator 726”, previously “load”.

Paragraph 85 line 6 refers to “IED 804, 806”, 806 previously “a load”.

Paragraph 89 line 9 states “data fro the meter”, typo.

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Paragraph 107 lines 10-11 refer to “XML document 1200”, figure 12 labels as “Read part of XML document”.

Appropriate correction is required.

9. The examiner has provided a number of examples of the specification deficiencies in the above, however, the list of deficiencies may not be all inclusive. Applicant should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the specification objections.

Claim Objections

10. Claims 1, 3-8, 11, 13, 17, 18, 21, 23-26 and 29-31 are objected to because of the following informalities:

Claims 1, 3-8, 11, 13, 17, 18, 21, 23-26 and 28-31 are objected to for their use of acronyms that are not defined in the claim, could create antecedent problems in the claims.

Claim 1 line 14 states “the flow of electrical energy”, previously states “the flow of energy”. Could create an antecedent problem in the claim.

Claim 26 line 2 refers to “the well-formedness”, would be better as “a well-...” because this limitation was not previously presented and “the” is a positive recitation of the limitation.

Claim 30 refers to (“IED”), would be better as “(IED)” to indicate that an acronym is being defined.

Claim 31 line 12 refers to “said at least one quantity”, previously “at least quantity”.

Appropriate correction is required.

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11. The examiner has provided a number of examples of the claim deficiencies in the above, however, the list of deficiencies may not be all inclusive. Applicant should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the claim objections.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 10 recites the limitation "said at least one energy management device" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Not previously referred to as "at least one".

Double Patenting

14. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

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A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

15. Claims 1-31 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-31 of copending Application No. 10/627,244. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 1, 3-11 and 13-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chattopadhyay (U.S. Pub 2002/0103772) in view of Piotrowski (U.S. Pub 2003/0236903).

Chattopadhyay teaches (claim 1) an energy management device (reference number 30) for managing the flow of energy in an energy distribution system (reference number 20), said energy management device for use in an energy management architecture for managing said energy distribution system (figure 1), said energy management architecture comprising a network (reference number 40), said energy management device comprising a network interface operative to couple said energy management device with said network (reference number 34), an energy distribution system interface operative to couple said energy management device with said energy distribution system (reference number 32), said energy management device further operative to measure at least one energy management quantity via said energy distribution system interface (paragraph 23), a processor coupled with said network interface and said energy distribution system interface and operative to process said at least one energy management quantity to manage the flow of electrical energy (paragraph 23), and wherein said network interface is further operative to incrementally receive one of a power management command and power management data (paragraph 23-25, 32, 34), an XML document (paragraph 34) (claim 11, differing from claim 1) further operative to generate one of a power management command and power management data related thereto (paragraph 23), (claim 21, 28) in an energy management device (reference number 50) a method of transmitting a communication from said energy management device over a network (reference number 40) coupled with said energy management device (figure 1), said method comprising generating a set of data to be communicated over said network as an XML document (paragraph 34) transforming each of said data into an XML format as it is generated (paragraph 34) and communicating each of said XML formatted data over said network (paragraph 31-37), (claim 23, 29) in an energy management

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device (reference number 50) a method of receiving a communication from a network coupled with said energy management device, said method comprising receiving data comprising one of a plurality of portions of an XML document from said network (paragraph 32-37), (claim 30) an electrical power management architecture for managing an electrical power distribution system comprising (figure 1) a network (reference number 40) at least one intelligent electronic device ("IED") coupled with a portion of said electrical power distribution system and further coupled with said network (reference number 30) each of said at least one IED operative to implement a power management function in conjunction with said portion of said electrical power distribution system (abstract, metering) said power management function operative to respond to at least one power management command and generate power management data (abstract), each of said at least one IED comprising a first network interface operative to couple said at least one IED with said network and facilitate transmission of said power management data and receipt of said at least one power management command over said network (reference number 34) said architecture further comprising a power management application coupled with said network and operative to receive and process said first incrementally generated XML document comprising said power management data (reference number 50), and generate said second XML document comprising said at least one power management command to said at least one IED to implement said power management function (paragraph 32-37), (claim 31, differing from previous claims) an energy meter (abstract, reference number 30) for managing the flow of electrical energy in an electrical distribution system, said energy meter for use in an energy management architecture for managing said electrical distribution system (figure 1), reference also teaches encryption, decryption (paragraph 54), at least one of SMTP, MIME and HTTP protocols (paragraph 32),

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data further comprises data based on at least one of load profile data, energy data, power quality data, an alert message, status information and energy management configuration information, price, cost, temperature (paragraph 28), where said at least one energy management device comprises at least one of relay, electric meter, revenue meter, power quality meter, water meter, air meter, gas meter, and steam meter (reference number 30), network interface being further operative to secure at least one of said plurality of segments (paragraph 33), measuring at least one quantity related to an energy distribution system, said set of data being generated based on said measuring (abstract). Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

Chattopadhyay fails to teach (claim 1) the XML document being received as a plurality of segments, wherein said network interface is capable of processing at least one received of said plurality of segments and extracting said one of said power management command and power management data therefrom prior to receiving all of said plurality of segments, (claim 11) incrementally generate an XML document comprising said one of a power management command and power management data, said XML document being generated as a plurality of segments, wherein each of said plurality of segments is communicated to said network as it is generated, (claim 21, 28) releasing at least one resource utilized by said XML formatted data from said energy management device as it is communicated, and repeating said transforming and said communicating until the entire said set of data has been communicated, (claim 23, 29) as said data is received, determining when said received one of said plurality of portions comprises processable XML code, and when enough data to process has been received, processing said

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portion to interpret said processable XML code contained therein, and repeating said receiving, determining and processing until all of said XML document has been received.

Piotrowski teaches an XML document being received as a plurality of segments (paragraph 8), wherein said network interface is capable of processing at least one received of said plurality of segments and extracting said one of said power management command and power management data therefrom prior to receiving all of said plurality of segments (figure 4, abstract, paragraphs 5-9, 15-25), (claim 11) incrementally generate an XML document said XML document being generated as a plurality of segments, wherein each of said plurality of segments is communicated to said network as it is generated (abstract, paragraph, 8, 9, streaming) (claim 21, 28) releasing at least one resource utilized by said XML formatted data from said energy management device as it is communicated, and repeating said transforming and said communicating until the entire said set of data has been communicated (figure 4), (claim 23, 29) as said data is received, determining when said received one of said plurality of portions comprises processable XML code, and when enough data to process has been received, processing said portion to interpret said processable XML code contained therein, and repeating said receiving, determining and processing until all of said XML document has been received (figure 4, all). Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention. Specific elements such as specific protocols, compression and authentication are not specifically addressed because the Examiner considers these aspects inherent, because they are so well known in the art of networks and network communications and would be obvious variations.

Chattopadhyay and Piotrowski are analogous art because they are both related to network based communications that utilize XML documents.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the streaming process as depicted in figure 4 of Piotrowski in the system and method for collecting real-time power information of Chattopadhyay because Piotrowski teaches an improved method and apparatus that allows the prioritization of data in XML documents so that high priority information can be acted upon quicker (paragraph 6), allows the receiver to decode portions of an XML document in a prioritized manner, allowing the XML receiver to begin processing the most important XML portions of an XML stream first as well as in mid-transmission and allowing a user to end the transmission before lower priority XML portions are received (paragraph 7), also a user can terminate further transmissions of the XML portion and can decode only the XML portions he or she determines to be important within the XML document and can reconstruct the entire XML document, provided enough of the streamed XML portions are received, even if certain lower priority XML portions are missing (paragraph 9).

18. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chattopadhyay (U.S. Pub 2002/0103772) in view of Piotrowski (U.S. Pub 2003/0236903) as applied to claims 1 and 11 above, and further in view of Young (U.S. Pat 6,377,939).

Chattopadhyay as modified by Piotrowski teaches an energy management device as recited in claims 1 and 11 for the reasons above, differing from the invention as recited in claims 2 and 12 in that their combined teaching lacks a display.

Young teaches an energy management device that communicates with XML documents for metering that includes a display (figure 1A, reference number 770).

Chattopadhyay as modified by Piotrowski and Young are analogous art because they are both related to metering devices that utilize XML.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the display of Young in the energy management device of Chattopadhyay as modified by Piotrowski because Young teaches numerous advantages in a system that can provide a scalable infrastructure to meter, rate, provision, account for, authorize, authenticate, mediate, and bill for services, such as usage-based services and can advantageously employ the system to meter detailed usage information and assign charges for value added services. They can also use the system for processing other metered information regarding the services and their use, such as, for example, information for authentication of users, for prepayment or for credit pre-authorization for service charges (col. 3 lines 29-44).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Romero et al (U.S. Pub 2002/0059367) – teaches XML document communications for devices with limited capability.

Weiss (U.S. Pat 6,681,156) – teaches an energy management system that uses XML.

Boies et al (U.S. Pat 6,631,309) – teaches a power monitoring system that use XML.

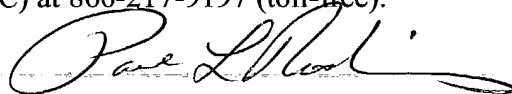
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Nierlich et al (U.S. Pat 6,519,509) – teaches a system and method for monitoring and controlling energy distribution using XML.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul L Rodriguez whose telephone number is (703) 305-7399 (Examiners phone number will change to (571) 272-3753 on 10/13/04). The examiner can normally be reached on 6:00 - 4:30 T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul L Rodriguez
Primary Examiner
Art Unit 2125

PLR
9/29/04